## CITY OF



# LA GRANDE

THE HUB OF NORTHEASTERN OREGON

City of La Grande, Building and Safety Division 1000 Adams Ave., La Grande, OR 97850 \*Mailing Address: PO Box 670, La Grande. OR 97850 PHONE: (541)963-1224 FAX: (541)663-8106

# **Residential Energy Additional Measure Selection**

### **RESIDENTIAL INFORMATION**

Building Permit Number 489

Owners Name:\_\_\_ Job Address:

Date:

City:

\_\_\_\_\_, State:\_\_\_\_\_

\_ Zip: \_\_\_

# INSTRUCTIONS Please select type of construction below; sign, date, and complete the <u>entire form</u>. Submit the form with your permit application or your project will be placed on hold until the required information is provided. O New Construction. All conditioned spaces within residential buildings must comply with Table N1101.1(1) and one additional measure from Table N1101.1(2) on page 2. Additions. Additions to existing building or structures may be made without making the entire building or structure comply if the new additions comply with requirements of this chapter. N1101.3 O Large additions. Additions that are equal to or more than 600 square feet in area, must comply with Table N1101.1(2) on page 2. N1101.3.1 O Small Additions. Additions that are less than 600 square feet in area, must select one measure from Table 1101.1(2)

Small Additions. Additions that are less than 600 square feet in area, must select one measure from Table 1101.1(2) or comply with Table N1101.1(3) below. (N1101.3.2)

**Exception:** Additions that are less than 225 square feet in area whichever is less, are not required to comply with Table N1101.1(2) or Table N1101.1(3)

### Selected item number:

Note: Depending on which Additional Measure you have selected, there may be sub-options that you will have to specify. Check the Appropriate box if provided.

Applicant Signature: \_

Print Name:

TABLE N1101.1(3) - SMALL ADDITION ADDITIONAL MEASURES (SELECT ONE)				
$\bigcirc$	1	Increase the ceiling insulation of the existing portion of the home as specified in Table N1101.1(1)		
$\bigcirc$	2	Replace all existing single pane wood or aluminum windows to the U-factor as specified in Table N1101.1(1)		
0	3	Insulate the floor system as specified in Table N1101.1(1) & install 100 percent of permanently installed lighting fixtures as CFL, LED or linear fluorescent or a min. efficacy of 40 lumens per watt as specified in Section N1107.2.		
$\bigcirc$	4	Test the entire dwelling with a blower door and exhibit that no more that 4.5 air changes per hour @ 50 Pascals.		
$\bigcirc$	5	Seal and performance test the duct system		
$\bigcirc$	6	Replace existing 80 percent AFUE or less gas furnace with a 92 percent AFUE or greater system.		
$\bigcirc$	7	Replace existing electric radian space heaters with a ductless mini split system with a minimum HSPF of 10.0.		
$\bigcirc$	8	Replace existing electric forced air furnace with an air sourced heat pump with a minimum HSPF of 9.5.		
0	9	Replace existing water heater with a water heater meeting: Natural gas/propane water heater with minimum UEF 0.90, or Electric Heat Pump water heater with minimum 2.0 COP		

	TABLE N1101.1(2) ADDITIONAL MEASURES				
		HIGH EFFICIENCY HVAC SYSTEM <sup>a</sup>			
$\cap$		a. Gas-fired furnance or boiler AFUE 94%, or			
$\cup$	1	b. Air source heat pump HSPF 10.0/12.0 SEER cooling , or			
		c. Ground source heat pump COP 3.5 or Energy Star rated			
		HIGH EFFIENCY WATER HEATING SYSTEM			
		a. Natural gas/propone water heater with minimum UEF 0.90, or			
$\bigcirc$	2	b. Electric heat pump water heater with minimum 2.0 COP, or			
		c. Natural gas/propane tankless/instantaneous water heater with minimum 0.80 UEF and Drain Water Heat			
		Recovery Unit installed on minimum of one shower/tub-shower.			
$\bigcirc$	3	WALL INSULATION UPGRADE			
$\cup$	5	Exterior walls- u0.045/R-21 conventional framing with R-5 continuous insulation.			
		ADAVANCE ENVELOPE			
$\cap$	4	Windows - U-0.21 (Area Weighted average), and			
$\cup$	4	Flat Ceiling <sup>b</sup> - R-60, or			
		Framed floors - R-38 or slab edge insulation R-10 for 48", R-15 for 36" or R-5 fully insulated slab			
		DUCTLESS HEAT PUMP			
$\bigcirc$	5	For dwelling units with all-electric heat provide:			
$\cup$		Ductless heat pump of minimum HSPF 10 in primary zone replaces zonal electric heat sources, and			
		Programmable thermostat for all heaters in bedrooms.			
$\bigcirc$	6	HIGH EFFICIENCY THERMAL ENVELOPE UA <sup>c</sup>			
$\smile$	Ľ	Proposed UA is 8 percent lower than the code UA			
$\bigcirc$	7	GLAZING AREA			
$\cup$		Glazing area, measured as the total of framed openings is less than 12 percent of the conditioned floor area.			
		3 ACH AIR LEAKAGE CONTROL AND EFFICIENT VETILATION			
$\bigcirc$	8	Achieve a maximum of 3.0 ACH50 whole-house air leakage when third-party tested and provide a whole-house			
$\bigcirc$		ventilation system including heat recovery with a minimum sensible heat recover efficiency of not less than 66			
		percent.			

- a. Appliances located within the building thermal envelope shall have sealed combustion air installed. Combustion air shall be ducted directly from the outdoors.
- b. The maximum vaulted ceiling surface area shall not be greater than 50 percent of the total heated space floor area unless vaulted area has a U-factor no greater than U-0.026.
- c. In Accordance with Table N1104.1(1) the proposed UA of the Proposed Alternative Design shall be a minimum of 8 percent less than the Code UA total of the Standard base case.

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